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<110> AGUERA, Michelle

<120> Modulation of Ulip/CRMP activity for the prevention or
treatment of myelin disorders

<130> P06974US01/BAS

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<150> US 60/246,751

<151> 2000-11-09

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<170> PatentIn Ver. 2.1

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<213> Homo sapiens

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Lys Val Ile Asp Ala Thr Gly Lys Leu Val Ile Pro Gly Gly Ile Asp

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Thr Ser Thr His Phe His Gln Thr Phe Met Asn Ala Thr Cys Val Asp

65 70 75 80

Asp Phe Tyr His Gly Thr Lys Ala Ala Leu Val Gly Gly Thr Thr Met

85 90 95

Ile Ile Gly His Val Leu Pro Asp Lys Glu Thr Ser Leu Val Asp Ala

100 105 110

Tyr Glu Lys Cys Arg Gly Leu Ala Asp Pro Lys Val Cys Cys Asp Tyr

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Ala Leu His Val Gly Ile Thr Trp Trp Ala Pro Lys Val Lys Ala Glu

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145 150 155 160

Met Thr Tyr Lys Asp Leu Tyr Met Leu Arg Asp Ser Glu Leu Tyr Gln

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Glu Asn Gly Glu Leu Val Ala Glu Gly Ala Lys Glu Ala Leu Asp Leu

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Gly Ile Thr Gly Pro Glu Gly Ile Glu Ile Ser Arg Pro Glu Glu Leu

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Glu Ala Glu Ala Thr His Arg Val Ile Thr Ile Ala Asn Arg Thr His

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Cys Pro Ile Tyr Leu Val Asn Val Ser Ser Ile Ser Ala Gly Asp Val

Ile Ala Ala Ala Lys Met Gln Gly Lys Val Val Leu Ala Glu Thr Thr
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Thr Ala His Ala Thr Leu Thr Gly Leu His Tyr Tyr His Gln Asp Trp
275 280 285

Ser His Ala Ala Ala Tyr Val Thr Val Pro Pro Leu Arg Leu Asp Thr
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Asn Thr Ser Thr Tyr Leu Met Ser Leu Leu Ala Asn Asp Thr Leu Asn
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Gly Lys Glu Asp Phe Thr Lys Ile Pro His Gly Val Ser Gly Val Gln
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Asp Arg Met Ser Val Ile Trp Glu Arg Gly Val Val Gly Gly Lys Met
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Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn Ala Ala Lys Leu
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Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro Gly Ala Asp Ala
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Asp Val Val Val Trp Asp Pro Glu Ala Thr Lys Thr Ile Ser Ala Ser
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Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu Asn Met Arg Cys

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His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg Val Val Tyr Glu

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Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys Phe Cys Pro Leu

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Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val Gln Arg Glu Lys

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Thr Leu Lys Val Arg Gly Val Asp Arg Thr Pro Tyr Leu Gly Asp Val

485 490 495

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Ala Val Val Val His Pro Gly Lys Lys Glu Met Gly Thr Pro Leu Ala

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Asp Thr Pro Thr Arg Pro Val Thr Arg His Gly Gly Met Arg Asp Leu

515 520 525

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His Glu Ser Ser Phe Ser Leu Ser Gly Ser Gln Ile Asp Asp His Val

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<212> DNA

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Leu Ile Val Pro Gly Gly Val Lys Thr Ile Glu Ala His Ser Arg Met
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Val Ile Pro Gly Gly Ile Asp Val His Thr Arg Phe Gln Met Pro Asp
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Gln Gly Met Thr Ser Ala Asp Asp Phe Phe Gln Gly Thr Lys Ala Ala
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Leu Ala Gly Gly Thr Thr Met Ile Ile Asp His Val Val Pro Glu Pro
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Gly Thr Ser Leu Leu Ala Ala Phe Asp Gln Trp Arg Glu Trp Ala Asp
115 120 125

Ser Lys Ser Cys Cys Asp Tyr Ser Leu His Val Asp Ile Ser Glu Trp
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His Lys Gly Ile Gln Glu Glu Met Glu Ala Leu Val Lys Asp His Gly
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Val Asn Ser Phe Leu Val Tyr Met Ala Phe Lys Asp Arg Phe Gln Leu
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Thr Asp Cys Gln Ile Tyr Glu Val Leu Ser Val Ile Arg Asp Ile Gly
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Ala Ile Ala Gln Val His Ala Glu Asn Gly Asp Ile Ile Ala Glu Glu
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Gln Gln Arg Ile Leu Asp Leu Gly Ile Thr Gly Pro Glu Gly His Val
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Leu Ser Arg Pro Glu Glu Val Glu Ala Glu Ala Val Asn Arg Ala Ile
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Ser Lys Ser Ser Ala Glu Val Ile Ala Gln Ala Arg Lys Lys Gly Trp
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Val Lys Thr Ile Ser Ala Lys Thr His Asn Ser Ser Leu Glu Tyr Asn
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Val Thr Pro Ala Ser Ser Ala Lys Thr Ser Pro Ala Lys Gln Gln Ala

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Pro Pro Val Arg Asn Leu His Gln Ser Gly Phe Ser Leu Ser Gly Ala

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Gln Ile Asp Asp Asn Ile Pro Arg Arg Thr Thr Gln Arg Ile Val Ala

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<212> DNA

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<213> Homo sapiens

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Gln Thr Arg Met Leu Glu Met Gly Ile Thr Gly Pro Glu Gly His Val

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Leu Ser Arg Pro Glu Glu Leu Glu Ala Glu Ala Val Phe Arg Ala Ile

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Thr Ile Ala Ser Gln Thr Asn Cys Pro Leu Tyr Val Thr Lys Val Met

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Ser Lys Ser Ala Ala Asp Leu Ile Ser Gln Ala Arg Lys Lys Gly Asn

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Val Val Phe Gly Glu Pro Ile Thr Ala Ser Leu Gly Ile Asp Gly Thr

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His Tyr Trp Ser Lys Asn Trp Ala Lys Ala Ala Ala Phe Val Thr Ser

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Pro Pro Leu Ser Pro Asp Pro Thr Thr Pro Asp Tyr Ile Asn Ser Leu

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Ser Thr Ala Gln Lys Ala Ile Gly Lys Asp Asn Phe Thr Ala Ile Pro

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<210> 8

<211> 572

<212> PRT

<213> Homo sapiens

<400> 8

Met Ser Tyr Gln Gly Lys Lys Ser Ile Pro His Ile Thr Ser Asp Arg

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Leu Leu Ile Lys Gly Gly Arg Ile Ile Asn Asp Asp Gln Ser Leu Tyr

20 25 30

Ala Asp Val Tyr Leu Glu Asp Gly Leu Ile Lys Gln Ile Gly Glu Asn

35 40 45

Leu Ile Val Pro Gly Gly Val Lys Thr Ile Glu Ala Asn Gly Arg Met

50 55 60

Val Ile Pro Gly Gly Ile Asp Val Asn Thr Tyr Leu Gln Lys Pro Ser

65 70 75 80

Gln Gly Met Thr Ala Ala Asp Asp Phe Phe Gln Gly Thr Arg Ala Ala

85 90 95

Leu Val Gly Gly Thr Thr Met Ile Ile Asp His Val Val Pro Glu Pro

100 105 110

Gly Ser Ser Leu Leu Thr Ser Phe Glu Lys Trp His Glu Ala Ala Asp

115 120 125

Thr Lys Ser Cys Cys Asp Tyr Ser Leu His Val Asp Ile Thr Ser Trp

130 135 140

Tyr Asp Gly Val Arg Glu Glu Leu Glu Val Leu Val Gln Asp Lys Gly

145 150 155 160

Val Asn Ser Phe Gln Val Tyr Met Ala Tyr Lys Asp Val Tyr Gln Met

165 170 175

Ser Asp Ser Gln Leu Tyr Glu Ala Phe Thr Phe Leu Lys Gly Leu Gly

180 185 190

Ala Val Ile Leu Val His Ala Glu Asn Gly Asp Leu Ile Ala Gln Glu

195 200 205

Gln Lys Arg Ile Leu Glu Met Gly Ile Thr Gly Pro Glu Gly His Ala

210 215 220

Leu Ser Arg Pro Glu Glu Leu Glu Ala Glu Ala Val Phe Arg Ala Ile

225 230 235 240

Thr Ile Ala Gly Arg Ile Asn Cys Pro Val Tyr Ile Thr Lys Val Met

245 250 255

Ser Lys Ser Ala Ala Asp Ile Ile Ala Leu Ala Arg Lys Lys Gly Pro

260 265 270

Leu Val Phe Gly Glu Pro Ile Ala Ala Ser Leu Gly Thr Asp Gly Thr

275 280 285

His Tyr Trp Ser Lys Asn Trp Ala Lys Ala Ala Ala Phe Val Thr Ser

290 295 300

Pro Pro Leu Ser Pro Asp Pro Thr Thr Pro Asp Tyr Leu Thr Ser Leu

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10

15

20

25

30

Arg Val Lys Ile Arg Asn Lys Val Phe Gly Leu Gln Gly Val Ser Arg

495

510

525

540

560

570

<213> Homo sapiens

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<210> 10

<211> 572

<212> PRT

<213> Homo sapiens

<400> 10

Met Ser Phe Gln Gly Lys Lys Ser Ile Pro Arg Ile Thr Ser Asp Arg

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5

10

15

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20 25 30

Ala Asp Val His Val Glu Asp Gly Leu Ile Lys Gln Ile Gly Glu Asn

35 40 45

Leu Ile Val Pro Gly Gly Ile His Thr Ile Asp Ala His Gly Leu Met

50 55 60

Val Leu Pro Gly Gly Val Asp Val His Thr Arg Leu Gln Met Pro Val

65 70 75 80

Leu Gly Met Thr Pro Ala Asp Asp Phe Cys Gln Gly Thr Lys Ala Ala

85 90 95

Leu Ala Gly Gly Thr Thr Met Ile Leu Asp His Val Phe Pro Asp Thr

100 105 110

Gly Val Ser Leu Leu Ala Ala Tyr Glu Gln Trp Arg Glu Arg Ala Asp

115 120 125

Ser Ala Ala Cys Cys Asp Tyr Ser Leu His Val Asp Ile Thr Arg Trp

130 135 140

His Glu Ser Ile Lys Glu Glu Leu Glu Ala Leu Val Lys Glu Lys Gly

145 150 155 160

Val Asn Ser Phe Leu Val Phe Met Ala Tyr Lys Asp Arg Cys Gln Cys

165 170 175

Ser Asp Ser Gln Met Tyr Glu Ile Phe Ser Ile Ile Arg Asp Leu Gly

180 185 190

Ala Leu Ala Gln Val His Ala Glu Asn Gly Asp Ile Val Glu Glu Glu

5

10

15

20

25

30

Cys Val Ala Ser Gly Lys Met Asp Glu Asn Glu Phe Val Ala Val Thr

370 375 380

Ser Thr Asn Ala Ala Lys Ile Phe Asn Phe Tyr Pro Arg Lys Gly Arg

385 390 395 400

Val Ala Val Gly Ser Asp Ala Asp Leu Val Ile Trp Asn Pro Lys Ala

405 410 415

Thr Lys Ile Ile Ser Ala Lys Thr His Asn Leu Asn Val Glu Tyr Asn

420 425 430

Ile Phe Glu Gly Val Glu Cys Arg Gly Ala Pro Ala Val Val Ile Ser

435 440 445

Gln Gly Arg Val Ala Leu Glu Asp Gly Lys Met Phe Val Thr Pro Gly

450 455 460

Ala Gly Arg Phe Val Pro Arg Lys Thr Phe Pro Asp Phe Val Tyr Lys

465 470 475 480

Arg Ile Lys Ala Arg Asn Arg Leu Ala Glu Ile His Gly Val Pro Arg

485 490 495

Gly Leu Tyr Asp Gly Pro Val His Glu Val Met Val Pro Ala Lys Pro

500 505 510

Gly Ser Gly Ala Pro Ala Arg Ala Ser Cys Pro Gly Lys Ile Ser Val

515 520 525

Pro Pro Val Arg Asn Leu His Gln Ser Gly Phe Ser Leu Ser Gly Ser

530 535 540

Gln Ala Asp Asp His Ile Ala Arg Arg Thr Ala Gln Lys Ile Met Ala

545 550 555 560

Pro Pro Gly Gly Arg Ser Asn Ile Thr Ser Leu Ser

565 570

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<210> 11

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<212> PRT

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<223> Description of Artificial Sequence: immunogenic
peptide

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Lys Glu Met Gly Thr Pro Leu Ala Asp Thr Pro Thr Arg Pro Val Thr

1 5 10 15

20

Arg His Gly Gly

20

25

<210> 12

<211> 12

<212> PRT

<213> Artificial Sequence

30

<220>

<223> Description of Artificial Sequence: immunogenic
peptide

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Leu Glu Asp Gly Thr Leu His Val Thr Glu Gly Ser

1 5 10

<210> 13

<211> 16

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: immunogenic
peptide

<400> 13

Ile Thr Gly Pro Glu Gly His Val Leu Ser Arg Pro Glu Glu Val Glu

1 5 10 15

<210> 14

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: immunogenic
peptide

<400> 14

Leu Thr Ser Phe Glu Lys Trp His Glu Ala Ala Asp Thr Lys Ser

1 5 10 15

5 <210> 15
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 <212> PRT
 <213> Artificial Sequence

10 <220>
 <223> Description of Artificial Sequence: immunogenic
 peptide

15 <400> 15
 Glu His Asp Ser His Ala Gln Leu Arg Trp Arg Val Leu
 1 5 10

20 <210> 16
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 <212> DNA
 <213> Artificial Sequence

25 <220>
 <223> Description of Artificial Sequence: primer

 <400> 16
 atagacacga tgccaagacc ttacc 25

30
 <210> 17
 <211> 22

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 10661-222860

<213> Artificial Sequence

<223> Description of Artificial Sequence: primer

attaccgcac catcctcaag gc

22

<211> 24

<213> Artificial Sequence

<223> Description of Artificial Sequence: primer

atcacccatc ccttactctt ctgg

24

<211> 25

<213> Artificial Sequence

<223> Description of Artificial Sequence: primer

cagaagaaaa agccagaaca gaccg

25

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10

<213> Artificial Sequence

<223> Description of Artificial Sequence: primer

25

cccctcccca taaactctct ttg

19

<212> DNA

<213> Artificial Sequence

20

<223> Description of Artificial Sequence: primer

20

ctggaaagtt cacaggctgg

2

<212> DNA

<213> Artificial Sequence

3

<223> Description of Artificial Sequence: primer

<400> 22

cctaccaggg caagaagaac attcc

25

<210> 23

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

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ccgcaatggt cttcacacct cc

22

<210> 24

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 24

ctgtggatgt ggacatgaag c

21

<210> 25

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 25

agcaataaac aggtggaagg tc

22

<210> 26

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 26

agagagattc gcactca

17

<210> 27

<211> 19

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

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agtcctcct ggtaactgg

19

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<223> Description of Artificial Sequence: primer

<400> 28

gaagagtgg tcaagagccg

20

<210> 29

<211> 25

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 29

tgccatcttg acattgagga ggtcc

25

<210> 30

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense

<400> 30

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30